

BRIEF CURRICULUM VITAE

PROFESSOR DR. AHMAD ZAHARIN ARIS, CEnv, MRSC, FAPM, FTWAS, FASc

Faculty of Forestry and Environment / International Institute of Aquaculture and Aquatic Sciences

Universiti Putra Malaysia, 43400 UPM Serdang, Selangor Darul Ehsan, Malaysia

Email: zaharin@upm.edu.my | Telephone: +603-9769 7455 | Website: <http://hydrochemistry.upm.edu.my>



PERSONAL

Gender Male
Date of Birth June 5th, 1983
Nationality Malaysia
Marital Status Married

ACADEMIC QUALIFICATION

2009 PhD, Universiti Malaysia Sabah
2005 BSc. (Hons), Universiti Malaysia Sabah

ACADEMIC APPOINTMENT

2019-now Senior Professor (VK6), Universiti Putra Malaysia
2023-2023 Visiting Professor, Universitas Sumatera Utara, Indonesia
2023-2023 Visiting Professor, Department of Environmental Engineering, Universitas Islam Indonesia, Indonesia
2021-2022 Adjunct Professor, Faculty of Medicine and Health Sciences, UCSI University, Malaysia
2020-2022 Adjunct Professor, Faculty of Public Health, Airlangga University, Indonesia
2016-2019 Professor (VK7), Universiti Putra Malaysia
2013-2016 Associate Professor, Universiti Putra Malaysia
2009-2013 Senior Lecturer, Universiti Putra Malaysia
2006-2009 Tutor, Universiti Putra Malaysia

ACADEMIC REPUTATION

Professor Zaharin's research focuses on hydrochemistry, environmental chemistry and environmental forensics particularly on the analytical method development, identification, fate, remediation and health relevance of metals and emerging pollutants in the environment. His work has won many awards and pioneers to many where some have been used in environmental policies and guidelines ratification locally and internationally particularly on water and health and environmental forensics. He now leads multidisciplinary research work as well as environmental translational research activity through working in partnership with policy makers in translating research outputs through public engagement. He actively participates as advisor, chair and member for various government agencies and private committees internationally and locally.

Researcher	Particular
ORCiD	0000-0002-4827-0750
<i>h</i> Index (SCOPUS; 22133247800)	52 (Citations: 9638)
<i>h</i> Index (Web of Science; O-5116-2015)	43 (Citations: 6238)
<i>h</i> Index (Google Citations; Ahmad Zaharin Aris)	65 (Citations: 14785)

**As of Jan 14, 2025*

SELECTED AWARDS AND RECOGNITIONS

- Elected Fellow, The World Academy of Sciences (TWAS), UNESCO, 2025-lifetime
- Malaysia Scopus Research Excellence Awards (Groundbreaking Contributions), 2024
- Nominated for Merdeka Award 2024 - 'Outstanding Scholastic Achievement'
- Malaysia Final Candidate for Frontiers Planet Prize, 2nd Edition 2023-2024
- World Top 2% Scientists 2024 by Stanford University, 2024
- Universiti Malaysia Sabah Alumni Academic Icon Award, 2024
- Vice Chancellor Fellowship Award (Publication), Universiti Putra Malaysia, 2023
- Cozzarelli Prize from National Academy of Sciences, United States of America for "Pharmaceutical Pollution of the Worlds Rivers," by John L. Wilkinson et al. published in Proceedings of the National Academy of Sciences (PNAS), 2023
- World Top 2% Scientists 2023 by Stanford University, 2023
- 2023 Research.com Environmental Sciences in Malaysia Leader Award, 2023
- Malaysia Winner for APEC Science Prize for Innovation, Research, and Education ("ASPIRE"), Asia-Pacific Economic Cooperation, 2022
- UK Times Higher Education awards (THE Awards) for International Collaboration of the Year 2022 on Global Pharmaceuticals Monitoring Project led by University of York, UK, 2022
- World Top 2% Scientists 2022 by Stanford University, 2022
- 2022 Research.com Environmental Sciences in Malaysia Leader Award, 2022
- World Top 2% Scientists 2021 by Stanford University, 2021
- Elected Fellow, Academy of Sciences Malaysia, 2021-lifetime
- World Top 2% Scientists 2020 by Stanford University, 2020
- Malaysia Winner for APEC Science Prize for Innovation, Research, and Education ("ASPIRE"), Asia-Pacific Economic Cooperation, 2019
- Top Research Scientists Malaysia (TRSM) – Environmental Chemistry and Analysis, Academy of Sciences Malaysia, 2018
- Best Professor in Environmental Studies, The Golden Globe Tigers Award 2017, 2017
- Finalist for Zayed International Prize (Young Scientists Award for Environmental Sustainability), 2017
- First Runner Up, National Young Scientist Award 2016 (Anugerah Saintis Muda Negara 2016), Ministry of Science, Technology and Innovation Malaysia, 2016
- SEARCA Regional Professorial Chair, Southeast Asian Regional Centre for Graduate Study and Research in Agriculture (SEARCA), 2016-2017
- Young Scientist Award 2013 (Vice Chancellor Fellowship Award), Universiti Putra Malaysia, 2014
- Appeared in "Malaysia: Who's Who, Constitution, Government and Politics (2013/2014 Edition)" on "Youngest PhD graduate" published by Kasuya Management Sdn. Bhd.

ADMINISTRATIVE POSITION

2021-now	Director, International Institute of Aquaculture and Aquatic Sciences
2020-2021	Deputy Director, Institute of Advanced Technology
2016-2020	Dean, Faculty of Environmental Studies
2014-2016	Deputy Dean (Graduate, Research and Development), Faculty of Environmental Studies
2011-2014	Head of Research Centre, Environmental Forensics Research Centre

KNOWLEDGE DISSEMINATION

Criteria	Sub-Criteria	Total Number
	Publications in Indexed Journal as Corresponding Author	190

Publications and Intellectual Properties	Publications in Indexed Journal as Non-Corresponding Author	(55% Q1/Q2) 120
	Books/Monographs/Module authored	6
	Chapters in Book	42
	Policy Papers	5
	Patents / Copyrights	9
Scientific Presentation	Presentations as invited Keynote Speaker	
	• International	52
	• National	5
	Presentation as invited Plenary Speaker	
	• International	13
	• National	1
	Appearances as Invited Guest Speaker/Panelist in Mass media in area of expertise / conference / seminar / talk	82
Human Resource Development	Sabbatical of Foreign Scholar (Professor)	1
	Post-Doctoral	7
	Graduated PhD students	31
	Graduated Master students (Research Mode)	21
	Current PhD students	15
	Current Master students (Research Mode)	4
	Dissertation Projects (Bachelor and Master by Course Work)	88
	Graduated Research Trainees / Research Officers Supervised	7
	Community engagement (open talk and seminar, social media)	> 10,000

SELECTED PUBLICATION

1. Wee, S.Y., Aris, A.Z. (2023). Revisiting the “forever chemicals”, PFOA and PFOS exposure in drinking water. *npj Clean Water* 6, 57. DOI: 10.1038/s41545-023-00274-6
2. Wilkinson, Boxall, A.B.A., Kolpin, D.W., ... Aris, A.Z. (2022). Pharmaceutical pollution of the world's rivers. *Proceedings of the National Academy of Sciences of the United States of America*, 119(8), e2113947119. DOI: 10.1073/pnas.2113947119
3. Wee, S. Y., Ismail, N. A. H., Haron, D. E. M., Yusoff, F.M., Praveena, S.M. & Aris, A. Z. (2022). Pharmaceuticals, hormones, plasticizers, and pesticides in drinking water. *Journal of Hazardous Materials*, 424, 127327.
4. Zaki, M.R.M., Zaid, S.H.M., Zainuddin, A.H. & Aris, A.Z. (2021). Microplastic pollution in tropical estuary gastropods: Abundance, distribution and potential sources of Klang River estuary, Malaysia. *Marine Pollution Bulletin*, 162, 111866
5. Ismail, N. A. H., Aris, A. Z., Wee, S.Y., Nasir, H.M., Razak, M.R., Kamarulzaman, N.H. & Omar, T.F.T. (2020). Occurrence and distribution of endocrine-disrupting chemicals in mariculture fish and the human health implications. *Food Chemistry*, 345, 128806
6. Wee, S. Y. & Aris, A. Z. (2019). Occurrence and public-perceived risk of endocrine disrupting compounds in drinking water. *npj Clean Water*, 2(1), 4
7. Omar, T. F. T., Aris, A. Z., Yusoff, F. M., & Mustafa, S. (2017). An Improved SPE-LC-MS/MS method for multiclass endocrine disrupting compound determination in tropical estuarine sediments. *Talanta*, 173, 51–59.
8. Wee, S. Y., & Aris, A. Z. (2017). Endocrine disrupting compounds in drinking water supply system and human health risk implication. *Environment International*, 106, 207 – 233.
9. Omar, T. F. T., Azrilawani, A., Aris, A.Z., Yusoff, F. M. (2016). Endocrine disrupting compounds (EDCs) in environmental matrices: Review of analytical strategies for pharmaceuticals, estrogenic hormones, and alkylphenol compounds. *TrAC - Trends in Analytical Chemistry*, 85, 241 – 259.
10. Aris, A.Z., Shamsuddin, A.S. and Praveena, S.M., (2014). Occurrence of 17 α -ethynylestradiol (EE2) in the environment and effect on exposed biota: A review. *Environment International*, 69, 104-119.

SELECTED PARTICIPATION IN SOCIETIES/NGO/EDITORIAL BOARD/ COMMITTEE BASED ON EXPERTISE

Professional Membership

- Fellow (FTWAS), The World Academy of Sciences (TWAS), UNESCO, 2024-lifetime
- Fellow (FASc), Academy of Sciences Malaysia, 2021-lifetime
- Fellow (FAPM), Academy of Professor Malaysia, 2023-lifetime
- Chartered Environmentalist (CEnv), Royal Society Chemistry, London (Chartered: 9301)
- Member (MRSC), Royal Society Chemistry, London (Membership: 589105)
- Member, Society for Environmental Geochemistry & Health London (Membership: 502295535-5603)
- Member, International Association of Hydrological Sciences (IAHS) (Member: 9230)
- Member, Majlis Profesor Negara, 2021-lifetime

Non-Governmental Organization and other Organizations/Institutions

- Board Member, Yayasan Anak Yatim dan Kebajikan Murid Islam Semenyih (YAYAKEM), 2023-present
- Board of Director, J-Biotech Sdn Bhd, 2024-now
- Board of Director, BD Agri Sdn Bhd, 2024-now
- Board of Director, BD Aquaculture Sdn Bhd, 2024-now
- Board of Advisor, Green Growth Asia Foundation, 2020-present
- Expert Advisor, Pakar Scieno TW Sdn Bhd, 2020-present
- Advisor, Koperasi Usahawan Belia Inovatif dan Kreatif Kedah Berhad, 2015-present

Editorial

- Editorial Board Member, Journal of Hazardous Materials (Q1), Elsevier, 2022-present
- Associate Editor, Environmental Geochemistry and Health (Q1), Springer, 2015-present
- Editorial Board Member, Scientific Reports (Q1), Nature, 2016-present
- Guest Chief Editor, Chemosphere (Q1), Elsevier, 2017- 2019
- Review Board Member, International Journal of Sediment Research (Q3), Elsevier, 2017-present
- Editorial Board Member, Geology, Ecology and Landscapes, Taylor & Francis, 2017-present

International Committee and Networking

- Peer Reviewers, Science Fund of the Republic of Serbia, 2020-2025
- Scientific Assessor, Chilean National Science and Technology Commission, 2019
- SEARCA Regional Professorial Chair, Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA), 2016-2017
- Committee Member, UI Greenmetric Network, 2019-2020
- Scientific Assessor Board, Natural Environment Research Council, Research Councils UK, 2017-present
- Scientific Assessor, European Commission, 2017-present
- Scientific Assessor, India Scientific Council, 2018-present
- Panelist, HLAFF PhD / Postdoctoral Scholarship for Human Life Advancement Foundation (HLAFF), 2016-present
- Government Advisor, Ministry of Environment and Water Resources, Republic of Trinidad and Tobago, 2014-2015 (on the establishment of Institute of Environmental Forensics)
- Panel of Grant Reviewer, South African Medical Research Council, 2013

- Member, A.ENERGY - Asian iNstitute for Environmental Research and energy, South Korea, 2010- 2013
- Working Member, Field-Oriented Leaders in Environmental Sectors in Asia and Africa (FOLENS), based at Tokyo University of Agricultural and Technology, Tokyo, 2010-2014
- International Scientific Committee Board Member and Core Founder, The 1st Asia- Pacific Coastal Aquifer Management Meeting (APCMM), Bangkok, Thailand, 2009

National Committee

- Vetting Committee, Biological, Agricultural and Environmental Sciences Fellow Selection, Academy of Sciences Malaysia, 2024-2025
- Member, Research University Committee, Ministry of Higher Education, 2021-present
- Member, Ethical Publication Committee, Ministry of Higher Education, 2023-present
- External Assessor, Bachelor of Environmental Science, Universiti Malaysia Sabah, 2022-2025
- Member, Water WEHAB++ Committee, Academy of Sciences Malaysia, 2023-2025
- Evaluation Committee, Top Research Scientists Malaysia (TRSM) Selection Committee, 2022-2023
- Member, Agriculture WEHAB++ Committee, Academy of Sciences Malaysia, 2021-2025
- Writer and Member, Study on Strengthening the Environmental Governance (SEG) in Malaysia, Academy of Sciences Malaysia, 2021-2022
- Advisor and Expert Member, Environmental Forensics Element for Department of Environment, Malaysia, 2015-present
- Advisor and Expert Member, Big Data for Environment for Department of Environment, Malaysia, 2021-present
- Committee Member, Research University Working Committee, Ministry of Higher Education, 2021-present
- External Assessor, Bachelor of Environmental Technology, Universiti Sains Malaysia, 2021-current
- External Assessor, Bachelor of Marine Science, Universiti Kebangsaan Malaysia, 2021-current
- External Assessor, Master of Sustainability, Universiti Kebangsaan Malaysia, 2021-current
- Auditor, Malaysia Research Assessment Committee, Ministry of Higher Education, 2019-present
- Chair, Working Group (WG) - Commercial Contract Cleaning Services, SIRIM STS Sdn Bhd, 2019-present
- Member, Technical Committee, Kajian Pembangunan Roadmap Agenda Nasional Bagi Transformasi Sektor Air Negara 2040, 2020
- Permanent Member, National Sustainable Development Goals 2030 (SDGs 2030) Steering Committee, Ministry of Economic Affairs Malaysia, 2019-present
- Committee Member, Environment and Development Cluster, Academy Professor of Malaysia, 2019-current
- Panel of Interviewer for Biasiswa Yang Dipertuan Agong Malaysia, Malaysia, 2018-current.
- Permanent Member, National Standard Committee on Environmental Management (NSC Z), Department of Standards Malaysia, 2018-present
- Panel of Assessor, Grant Evaluation Committee (COVID-19), Ministry of Education, May 2020 – present
- Panel of Assessor, Grant Evaluation Committee (FRGS and SATREPS), Ministry of Education, May 2019 – present
- Panel of Assessor/Auditor for Higher Institution Centre of Excellence Application, Ministry of Higher Education, 2018
- Panel of Assessor, Academic Promotion, Universiti Kebangsaan Malaysia, Universiti Malaysia Pahang, Universiti Pendidikan Sultan Idris, INTI International University, Unuversiti Malaysia Sabah, 2019 - present
- Board of Advisor, Curriculum Development of Bachelor of Environmental Technology for Universiti Teknologi MARA, 2018 - present
- Academic Advisor, Curriculum Development of Master of Science (Environmental Technology)

for Universiti Teknologi MARA, 2018 - present

- External Examiner (EE), Bachelor of Environmental Sustainability Management with Honours, Open University Malaysia, 2018-current
- Member, Jawatankuasa Penilaian Spesifikasi Dokumen Sebutharga Bagi Projek Penambahan Rangkaian Stesen Pengawasan Air Tanah Kebangsaan di Semenanjung Malaysia, Ministry of Natural Resources and Environment, 2017 - present
- Member, Task Force War Room, Semenyih River Pollution Issue, Ministry of Natural Resources and Environment, 2016
- Board of Advisor, Curriculum Development of Master in Environmental Forensics for Universiti Malaysia Terengganu, 2015 - present
- Member, Jawatankuasa Penilaian Perunding (JPP) Projek Kajian Pembentukan Kriteria & Standard Kualiti Air Tanah Kebangsaan, Ministry of Natural Resources and Environment, 2015 - 2017
- Expert Advisor, Department of Environment, Ministry of Natural Resources and Environment, Malaysia, 2013-present (on Groundwater Resources)
- Expert Advisor, Ministry of Health, Malaysia, 2014-present (on Drinking Water Standard)
- Member, Project Evaluation Committee, Department of Environment, Ministry of Natural Resources and Environment, Malaysia, 2016-current.



PROFESSOR DR. AHMAD ZAHARIN ARIS, CEnv, MRSC, FAPM, FTWAS, FASc has been a trailblazer in the realm of hydrochemistry and environmental forensics studies in Malaysia. His innovative work has played a significant role in establishing national and international guidelines and policies on environmental and health issues. He has successfully instituted various outstanding programs, including creating comprehensive chemical databases for fingerprinting and a hub for training and technological transfer in environmental forensics. Recognized as one of Malaysia's top researchers in environmental science, he is also a globally acclaimed scientist and academician in his field.

Professor Dr. Ahmad Zaharin's excellence has been acknowledged with numerous awards, including: Top Research Scientist Malaysia (2019), Finalist for the Zayed International Prize (Young Scientists Award for Environmental Sustainability), Young Scientist Award by Universiti Putra Malaysia (2013), Vice Chancellor Fellowship Award (2012 and 2022), Nominated for TWAS Earth Sciences Prize (2015), Nominated for the Merdeka Award 2024 - 'Outstanding Scholastic Achievement', Selected as Malaysia's Final Candidate for Frontiers Planet Prize, 2nd Edition 2023-2024, Recipient of the Malaysia APEC Science Prize for Innovation, Research, and Education ("ASPIRE") in 2019 and 2022

Apart from these, he has been recognized globally, with accolades such as being acknowledged among the World Top 2% Scientists (subject-wise) for 2020, 2021, 2022, 2023, and 2024. His exceptional merit led him to become the youngest elected Fellow of the Academy of Sciences Malaysia (FASc - ASM), as well as the youngest elected Fellow of the Academy of Professor Malaysia (FAPM) in 2023. Professor Dr. Ahmad Zaharin has served as an Associate Editor for several top-tier journals, including *Nature Scientific Reports*, *Journal of Hazardous Materials*, and *Environmental Geochemistry and Health*. His academic journey saw him being appointed as a professor at the young age of 33. Presently, he holds the position of Senior Professor specializing in the fields of Hydrochemistry, Environmental Chemistry and Analysis, and Environmental Forensics. He is also the Director at the International Institute of Aquaculture and Aquatic Sciences at Universiti Putra Malaysia. His academic contributions continue as an adjunct professor at UCSI University in Malaysia, Airlangga University in Indonesia, and a visiting professor at Universitas Sumatera Utara and Universitas Islam Indonesia.

Most recently, Professor Dr. Ahmad Zaharin was elected as a Fellow of The World Academy of Sciences (TWAS), UNESCO, recognizing his exceptional contributions to the advancement of science in developing countries.

Prior to the present appointment, he was the Dean, Deputy Director, Deputy Dean as well as the Head of the Environmental Forensics Research Centre at UPM. He also actively involved as a member of various committees internationally and locally including as advisor and strategic solution panel for Green Growth Asia Foundation and few other organizations and industries.

He also sits in the board of advisor for Master of Environmental Forensics curriculum development for Universiti Malaysia Terengganu, Environmental Chemistry Program and Environmental Technology Program at Universiti Teknologi MARA, Master in Climate Change, Master in Marine Science and

Environmental Science programs at Universiti Kebangsaan Malaysia and Universiti Malaysia Sabah, Environmental Technology program at Universiti Sains Malaysia and Polytechnic Division, Ministry of Higher Education for its Environmental Science curriculum as well as an external assessor for academic promotion (associate professor and professor) at few international and local universities. He is a board member for one international master joint program sponsored by Erasmus Plus (Erasmus +) by the European Union (EU).

Long an advocate for the research university as an engine of innovation and economic growth for the country, Ahmad Zaharin Aris also strived to shape emerging national policy on Mainstreaming Natural Resource Management Towards Achieving Sustainable Development for Eleventh Malaysia Plan 2016-2020. Some of his research findings have been used to set up guidelines and policies on environmental issues for example in setting up the National Water Quality Standards, revising the National Drinking Water Quality Standards which involves the incorporation of new parameters, particularly emerging pollutants, spurred by the outcomes and publications of his research, National Lake Water Quality Standards and National Groundwater Quality Standards for Ministry of Natural Resources and Environment, Malaysia and Ministry of Health Malaysia. Being involved with the community has been always part of his research mission and orientation, enabling local people to gain a better understanding and benefits from the findings after the research projects were completed. Recently, he sits as the advisor, steering committee member and expert advisor to the Department of Environment (DOE) Malaysia in their "Legislative Provisions for Inclusion of Environmental Forensic in Prosecution". In this provision, the DOE will place greater emphasis on the precautionary principle approach as one of the key considerations towards enhancing the environmental protection legislative framework of Malaysia. The precautionary principle enables rapid response in the face of possible danger to human, animal or plant health, or to protect the environment. The principle may be invoked when a phenomenon is identified by scientific or objective evaluation to have potentially adverse effects; case-in-point environmental contamination that resulted in severe environmental damage. In 2014, the government of the Republic of Trinidad and Tobago invited him as an advisor for establishment plan of the Institute of Environmental Forensics, for the country – a deep international recognition of his contributions and expertise. Besides, various government agencies and private sectors are now proposing and adopting the Environmental Forensics approach as part of their environmental monitoring, assessment, and policy revision strategies. This shows the results of his hard work on establishing and promoting environmental forensics in the country has paid off where it successfully brought to public or policy makers' attention in significant environmental sustainability issues with mobilizing action towards their solution. He has instituted many impressive and successful programs including establishing comprehensive chemical databases for fingerprinting and hub for training and technology transfer in environmental forensics. Besides, he also plays an important role in helping few agencies for the revision of their analytical analysis especially for the environmental samples. He also played a significant role as the team leader and a key resource person in the production of several policy papers and technical reports for stakeholders, particularly the Government of Malaysia. These include the "Public Awareness Study on Science, Technology & Innovation (STI) Malaysia 2022," which is crucial for policymakers to plan and implement strategies that ensure STI is easily understood and more appealing to the general public in Malaysia. The "Baseline Study of the National Indicators for Science, Technology, and Innovation Policy (DSTIN) 2021-2030" serves as a fundamental reference for stakeholders, policymakers, and the academic community, in addition to measuring achievements and trends in the implementation of the country's STI programs. The "Environmental Compliance Star Rating Study" aims to assess the feasibility of recognition for industries complying with the Environmental Quality Act, 1974 (EQA, 1974), as a means to evaluate, measure, appreciate, publicize, and encourage healthy competition in self-regulation for environmental conservation. Additionally, the "Study on the Presence of Endocrine Disrupting Chemicals (EDC) in Malaysia's Water Sources: Detection, Human Health Impact, and Socioeconomic Effects" acts as a pioneering national-scale study in the aspect of emerging pollutants in water resources.

He published over 500 academic writings related to his field in refereed international journals (over 330; more 285 in SCI Journals), books (6) and chapters in books (42), and the rest are conference papers

as well as five (5) policy papers. Over 55% of his published SCI papers are in Q1 and Q2 tiers. Some of his papers have been ranked as the most downloaded papers and received many citations within a short period of time and being used as a reference for few policy and white papers locally and internationally. Furthermore, Elsevier's Scival Spotlight has ranked him third among the global experts under the Distinguished Competency of water quality, sediment and pollution category. He has been featured in several international symposia, professional meetings, news media, and scientific publications. He has trained over 130 graduate and undergraduate students, postdoctoral associates, and visiting scholars locally and internationally in his laboratories (<http://hydrochemistry.upm.edu.my>).

Youngest to many

- PhD at the age of 25 in 2009 – youngest in Malaysia
- Youngest Dean to be appointed at UPM
- Youngest Associate Professor in Malaysia at the age of 30
- Youngest Professor to be Appointed in Malaysia at the age of 33
- Youngest Senior Professor to be Appointed in Malaysia at the age of 36
- Youngest Fellow of Academy Sciences of Malaysia to be Inducted in the academy history at the age of 38
- Youngest Fellow of Academy of Professor Malaysia to be Inducted at the age of 39.
- Youngest Fellow, The World Academy of Sciences (TWAS), UNESCO to be inducted at the age of 41.